

Appendix III
MARKED-UP VERSION OF REWRITTEN PARAGRAPHS
PURSUANT TO 37 C.F.R. § 1.121(b)(1)(iii)

Page 6, Para 7 (Amended)

Figure 1C: Deduced amino acid sequence of Xenopus CENP-E (SEQ ID NO:1). cDNA sequence was compiled from 6 overlapping cDNA clones. Residues identical in hCENP-E and XCENP-E are shaded. The boxed region at the amino-terminus of the sequence is that portion of XCENP-E containing the motor domain and used to assay motility *in vitro*. The boxed sequence at the C-terminus is that portion of XCENP-E designated as the tail. The underlined sequence NSREHSINA (SEQ ID NO:3) at position 599 is the 9 amino acid relative insertion encoded by one of the cDNAs isolated (see Figure 1A). The putative NLS, RKKTK (SEQ ID NO:4), immediately adjacent to the boxed tail domain is underlined.

Page 27, Para 2 (Amended)

Either naturally occurring or recombinant CENP-E can be purified for use in functional assays. Naturally occurring CENP-E is purified, [e.g., from *Xenopus*] e.g., from *Xenopus* and any other source of an XCENP-E homologue, such as *Drosophila* or fungi. Recombinant CENP-E is purified from any suitable expression system.

Page 53, Para 3 (Amended)

Immunoblotting of cultured *Xenopus* XTC cells using α -CENP-E_{TAIL} antibody revealed patterns of cell cycle-dependent localization similar to that observed for mammalian CENP-E (Yen, *et al.*, *Nature* 359:536-539 (1992); Brown, *et al.*, *J. Cell Sci.* 109:961-969 (1996)) with the exception that during interphase XCENP-E was localized to the nucleus, consistent with the presence of a nuclear localization signal (Boulikas, *et al.*, *Gene Express* 3:193-227 (1993)) at the C-terminal end of the rod domain (Figure 1A, NLS, and 1C underlined sequence, RKKTK (SEQ ID NO:4)). Nuclear staining intensity was variable from cell to cell, probably reflecting different levels of XCENP-E accumulation, as observed for cytoplasmic CENP-E staining of interphase human cells (Yen, *et al.*, *Nature* 359:536-539 (1992); Brown, *et al.*, *J. Cell Biol.* 125:1303[:]-1312 (1994)).